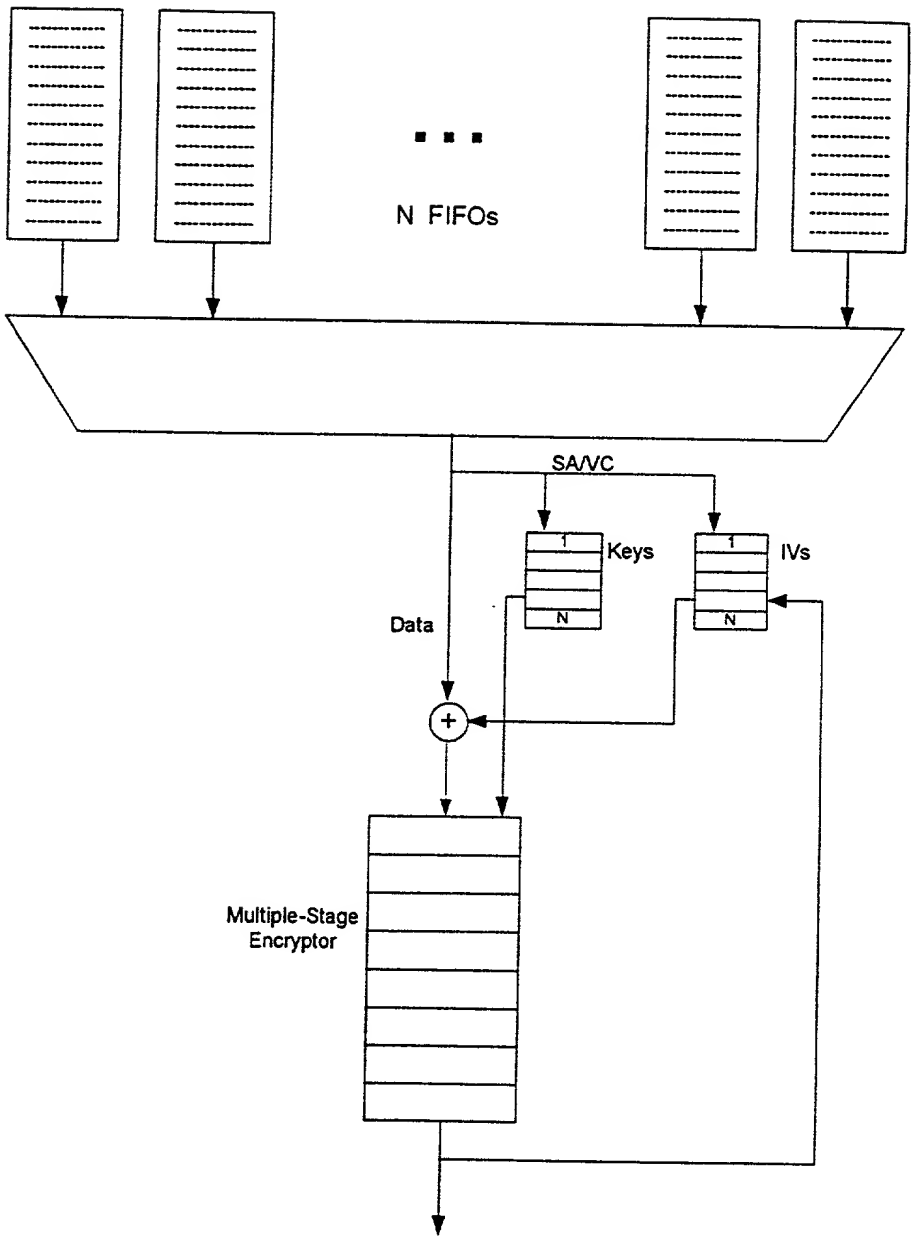
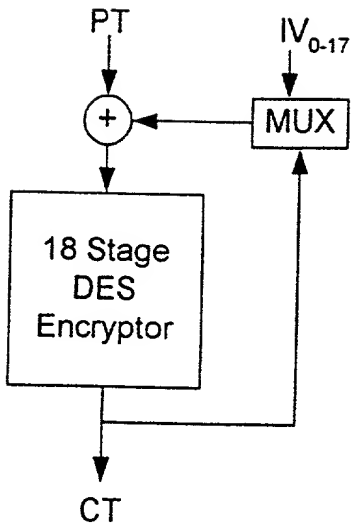
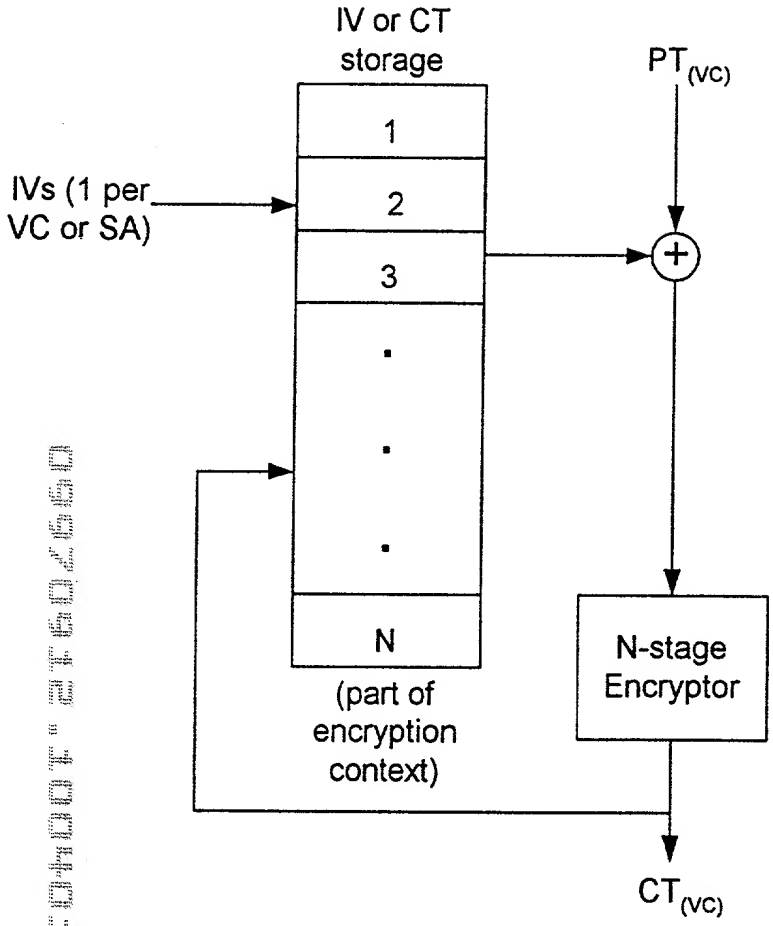


Figure 1.



$CT_1 = E(PT_1 \oplus IV_0)$
$CT_2 = E(PT_2 \oplus IV_1)$
$CT_3 = E(PT_3 \oplus IV_2)$
•
•
•
$CT_M = E(PT_M \oplus IV_{M-1})$
•
•
•
$CT_{18} = E(PT_{18} \oplus IV_{17})$
$CT_{19} = E(PT_{19} \oplus CT_1)$
$CT_{20} = E(PT_{20} \oplus CT_2)$
•
•
.
$CT_N = E(PT_N \oplus CT_{N-18})$

Figure 2.



$$CT_{1(VC1)} = E(PT_{1(VC1)} \oplus IV_{(VC1)})$$
$$CT_{1(VC2)} = E(PT_{1(VC2)} \oplus IV_{(VC2)})$$
$$\bullet$$
$$\bullet$$
$$\bullet$$
$$CT_{1(VCN)} = E(PT_{1(VCN)} \oplus IV_{(VCN)})$$
$$CT_{2(VC1)} = E(PT_{2(VC1)} \oplus CT_{1(VC1)})$$
$$\bullet$$
$$\bullet$$
$$\bullet$$
$$CT_{2(VCN)} = E(PT_{2(VCN)} \oplus CT_{1(VCN)})$$
$$\bullet$$
$$\bullet$$
$$\bullet$$
$$CT_{M(VCN)} = E(PT_{M(VCN)} \oplus CT_{M-1(VCN)})$$

Figure 3.

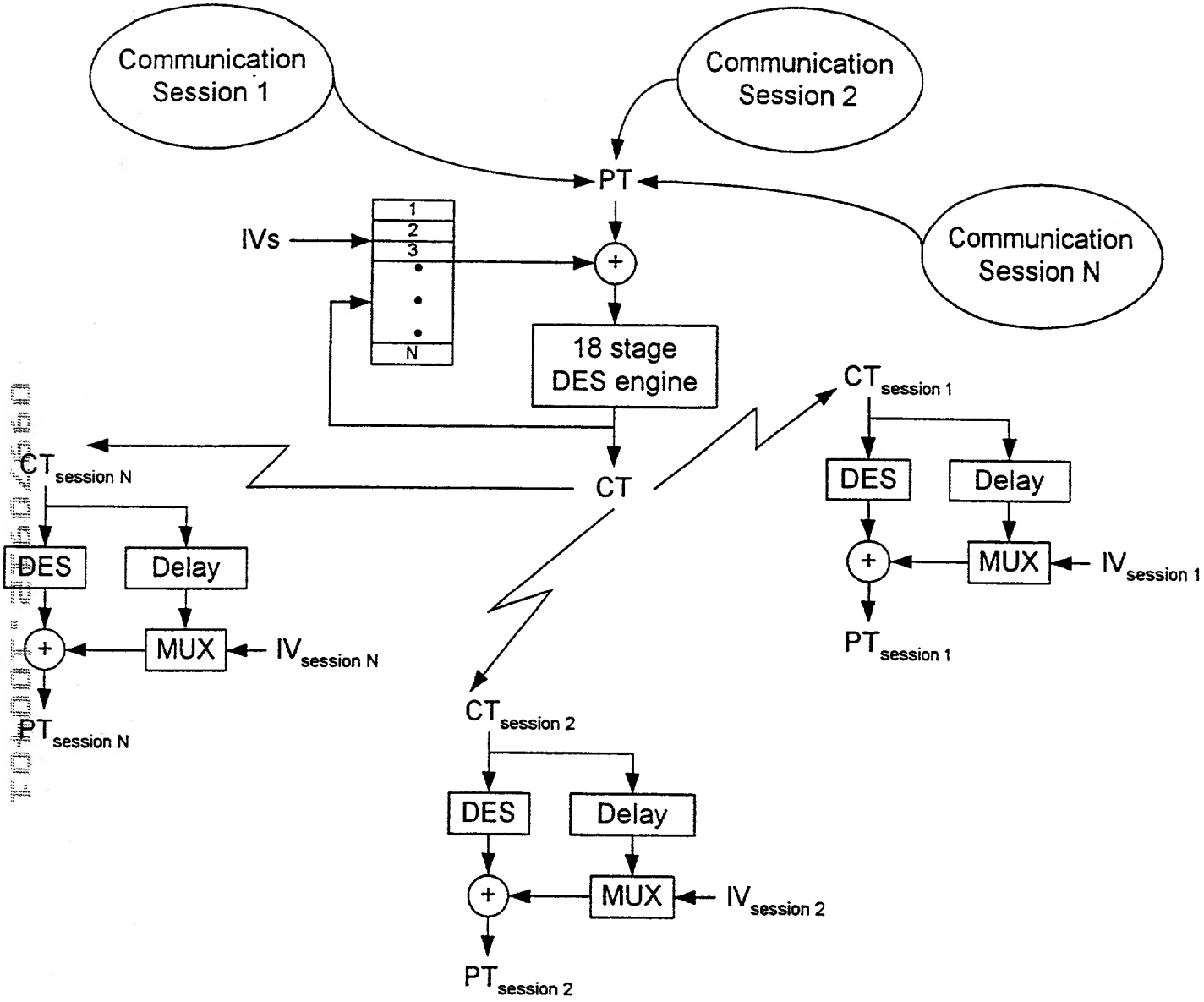

Communication Session 1
Communication Session 2
Communication Session N
PT
IVs
1
2
3
N
+
18 stage DES engine
CT
CT session N
DES
Delay
MUX
IV session N
PT session N
CT session 1
DES
Delay
MUX
IV session 1
PT session 1
CT session 2
DES
Delay
MUX
IV session 2
PT session 2

Figure 4

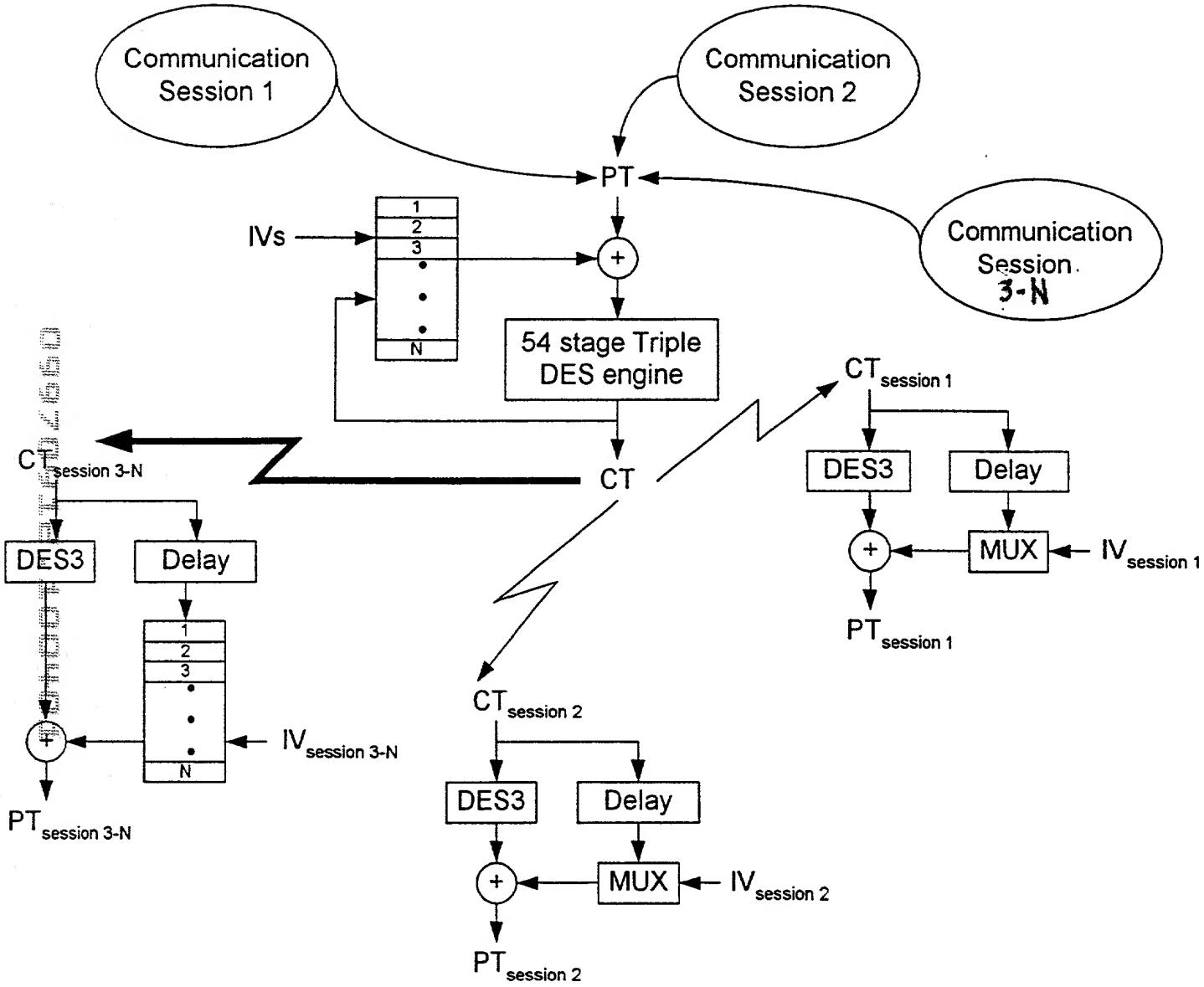

Communication Session 1
Communication Session 2
Communication Session 3-N
PT
IVs
1
2
3
N
54 stage Triple DES engine
CT
CT session 1
DES3
Delay
MUX
IV session 1
PT session 1
CT session 3-N
DES3
Delay
1
2
3
N
IV session 3-N
PT session 3-N
CT session 2
DES3
Delay
MUX
IV session 2
PT session 2

Figure 5